

Attorney Docket No.
D2A1180-1

10/805,592
Customer ID: 42671

IN THE CLAIMS:

Please amend the claims as follows. The claims are in the format as required by 35 C.F.R. § 1.121.

1.-7. (canceled)

8. (currently amended) ~~The system of claim 1,~~ A system comprising:
a pulse width modulation (PWM) controller,

wherein the PWM controller provides a first output for a high-side PWM signal
and a second output for a low-side PWM signal; and
an output stage,

wherein the output stage is configured to receive the high-side signal from the
first PWM controller output and the low-side signal from the second PWM
controller output, and

wherein the high-side signal is coupled to a high-side transistor through a pulse
transformer

wherein the output stage further comprises a third transistor, wherein the third transistor is coupled to receive the low-side signal and wherein the third transistor is configured to turn off the high-side transistor when the low-side signal is asserted.

9. (original) The system of claim 8, wherein the low-side signal is coupled to the third transistor through one or more level shifting capacitors.

10. (original) The system of claim 8, wherein the PWM controller is configured to provide a pulse at the second PWM controller output upon shutdown of the transistors.

11. (canceled)

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12. (original) An output stage for a PWM amplifier comprising:
a first input for a high-side PWM signal and a second input for a low-side PWM signal;
a first transistor coupled to receive the high-side PWM signal and a second transistor
coupled to receive the low-side PWM signal;
a pulse transformer coupled between the first input and the first transistor; and
a third transistor coupled between the second input and the first transistor;
wherein when a pulse is received at the first input, the first transistor is turned on, and
when a pulse is received at the second input, the second transistor is turned on
and the first transistor is turned off
13. (original) The system of claim 12, wherein the low-side signal is coupled to the third
transistor through one or more level shifting capacitors.
14. (original) The system of claim 12, wherein the PWM controller is configured to provide a
pulse at the second PWM controller output upon shutdown of the transistors.
15. (original) The system of claim 12, further comprising one or more level shifting
capacitors coupled between the second input and the second and third transistors.
16. (new) The system of claim 8, wherein the low-side signal is coupled to a low-side
transistor through one or more level shifting capacitors.
17. (new) The system of claim 8, further comprising a high-side programmable delay unit
configured to delay the high-side signal by a first programmable amount and a low- side
programmable delay unit configured to delay the low-side signal by a second programmable
amount.
18. (new) The system of claim 17, wherein the high-side programmable delay unit and the
low-side programmable delay unit are integrated into the PWM controller.
19. (new) The system of claim 17, wherein the high-side programmable delay unit is
digitally programmable to adjust the first programmable amount and the low-side programmable
delay unit is digitally programmable to adjust the second programmable amount.

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20. (new) The system of claim 17, wherein the PWM controller is configured to adjust overlap of pulses of the high-side signal and the low-side signal by adjusting at least one of the first and second programmable amounts.

21. (new) The system of claim 8, wherein the PWM controller is configured to produce a pulse as the high-side signal at the first PWM controller output.

22. (new) The system of claim 21, wherein the output stage further comprises a low-voltage driver, and wherein the low-voltage driver amplifies the pulse and transmits the amplified pulse to the pulse transformer.